

The final research paper is the compositional apex of the course. This project will enable you to study in depth a specific topic in engineering ethics of your own choosing.

Important Dates

The following milestones will help you start early and make continual progress in your work:

[1] Topic and Research Question	October 3
[2] Working Bibliography	October 17
[3] Introduction and Synopsis	October 31
[4] Complete Draft	November 9
[5] Peer Review	November 14
[6] Final Version	November 28

Each step of your research project outlined above will be returned at the next class meeting. Each stage will be checked and counted, but only the final version of your project will be graded.

From *Topic and Research Question* to *Thesis and Supporting Arguments*

You are free to explore any topic of moral inquiry that is integrally related to the course, encompassing the *full scope of engineering practice* (from pencils and paper clips to the farthest reaches of astronomical exploration) and the *entire spectrum of philosophical reflection* (from the epistemological and metaphysical grounding of moral theory to the social and political concerns of applied ethics). First, find a research topic in which you are genuinely interested, and focus on a specific question that will guide your work. Below are some *example subjects* that may serve as a catalyst for you, but find your own topic and develop your own research question. After delimiting the focus of your project, begin to study your primary sources, formulating your thesis and developing your supporting argumentation. As you carry out these steps, read carefully and apply the principles in *The Craft of Research*, “Asking Questions, Finding Answers,” 35–107, and “Making a Claim and Supporting It,” 109–181.

Law and Professionalism in Engineering Practice

- Should all engineers be licensed?
- Why have unions been unsuccessful in enrolling engineers?
- Do intellectual property laws and licensing requirements inhibit innovation in information technologies?

Moral Issues in Bioengineering and the Environment

- Should we drill for oil on some of the last areas of protected land on our continent in order to meet current energy demands and facilitate economic stability?
- What are the long-term implications of nuclear energy usage?
- Should we develop genetically engineered foods?

Technology and Society

- How can we establish security, safety, and privacy on the Internet?
- What are the fundamental ethical and moral issues involved in video games?
- Should large corporations transfer low skill jobs to developing countries whose labor costs are lower than in the United States?

Bibliography

Your bibliography should include key books and published journal articles related to your topic. Professional journals and university presses have the highest standards of research, scholarship, and editorial review. Consider your project as part of the ongoing discussion of your topic in the larger intellectual community. Evaluate all sources critically.

Format of the Research Paper

The text of your paper should be ten pages or more in length, double-spaced, in 12-point type, with one-inch margins. All references should be structured in *Chicago Manual of Style* citation format, with accurate footnotes and final bibliography. See *A Manual for Writers*, 116–281.

Checklist for Review of Research Paper Draft

Thesis and Arguments

- Is the thesis statement clear?
- Are terms and concepts defined precisely?
- Are the arguments in support of the thesis sound?
- Is there sufficient factual evidence in support of the thesis?
- Have possible counter-arguments been considered and addressed?
- Do all arguments focus on the thesis?

Organization

- Is the structure of the paper evident?
- Are the transitions between sections and paragraphs well-crafted?
- Is each paragraph coherent with a central idea integrally related to your thesis?
- Does each sentence have a clear purpose with cohesion between sentences?

Style and Mechanics

- Do the sentences flow gracefully, with a variety of sentence structures?
- Are the grammar and syntax cohesive?
- Are words chosen carefully?
- Are there any superfluous words?
- Are the spelling and punctuation correct?
- Are references cited properly?